DECLARATION FOR PATENT APPLICATION

As a below named inventor, I declare that I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

27 HUMAN SECRETED PROTEINS

the specification of which was filed on **September 13, 2000**, as Application Serial No. **09/661,453**.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT international application, which designated at least one country other than the United States listed below, and have also identified below any foreign application for patent or inventor's certificate, or PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application	on(s):		Priority Cla	<u>imed</u>
			Yes	No
(Number)	(Country)	(Day/Month/Year Filed)		
hereby claim the benef		§ 119(e) of any United States	provisional	
60/125,055 (Application Serial No	18 March			

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(b) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

PCT/US00/06783	16 March 2000	Pending
(Application Serial No.)	(Filing Date)	(Status: patented, pending, abandoned)

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: James H. Davis (Reg. No. 40,582), Kenley Hoover (Reg. No. 40,302), Joseph Kenny (Reg. No. 43,710), Jonathan

L. Klein (Reg. No. 41,119), Michele Wales (Reg. No. 43,975), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor:	Steven M. Ruben		
Inventor's signature:	nd	Date:	1/2.6/01
Residence: 18528 Heritage Hills Drive, C	Olney, MD 20832	Citizenship:	US
Post Office Address: same as above			
Full name of additional joint inventor:	Jian Ni		<i></i>
Inventor's signature:	776	Date:	23/0)
Residence: 5502 Manorfield Road, Rocky	ille, MD 20853	Citizenship:	<u>CN</u>
Post Office Address: same as above			
Full name of additional joint inventor:	Reinhard Ebner		
Inventor's signature:		Date:	
Residence: 9906 Shelburne Terrace, #316, Ga	ithersburg, MD 20878	Citizenship:	DE
Post Office Address: same as above			
Full name of additional joint inventor:	Craig A. Rosen		
		Date: //	29/11
Inventor's signature: Residence: 22400 Rolling Hills Vane, Lay	toneville MD 20882	Citizenship:	115
Post Office Address: same as above	tollsville, MID 20002	Citizensinp.	
rost Office Address. Same as above			
Full name of additional joint inventor:	Yanggu Shi		
Inventor's signature:	m Mis	Date:	12610
Residence: 437 West Side Drive, Apt. 102, G	aithersburg, MD 20878	Citizenship	: CN
Post Office Address: same as above		-	

Full name of additional joint inventor:	Charles E. Birse	
Inventor's signature:	2 Date:	······
Residence: 13822 Saddleview Drive, North I	Potomac, MD 20878 Citizenship:	GB W
Post Office Address: same as above		
	*	
77 78 0 1794 1194		
Full name of additional joint inventor:	Kimberly A. Florence	
Invantor's signsture:	Storona Date: 1/20	61
Inventor's signature: Residence: 12805 Atlantic Avenue, Rockville		// //
Post Office Address: same as above	citizenship.	03
1 ost Office Address. Same as above		
Full name of additional joint inventor:	George Komatsoulis	
9 1	1/	
Inventor's signature: Alburk 4.	Name Spring, MD 20901 Citizenship:	in del
Residence: 9518 Garwood Street, Silver	Spring, MD 20901 Citizenship:	US
Post Office Address: same as above		
Full name of additional joint inventor:	David W. LaFleur	
Januaria di matura	land Day Ila	
Inventor's signature: Residence: 3142 Quesada Street, N.W., Was	Chington, DC 20015 Citizenship:	6 01 TIC
Post Office Address: same as above	citizensinp.	<u> </u>
1 ost Office reducess. Same as above		
Full name of additional joint inventor:	Paul A. Moore	
A A.	./2	101
Inventor's signature: fam A M	······································	
Residence: 19005 Leatherbark Drive, Ger	mantown, MD 20874 Citizenship:	<u>UK</u>
Post Office Address: same as above		
Full name of additional joint inventor:	Henrik Olsen	
//	TION IN OBOIL	······································
Inventor's signature: think O	Date: 1/240	į
Residence: 182 Kendrick Place, #24, Gair	 	DK
Post Office Address: same as above		
		···-
Full name of additional joint inventor:	Paul Young	
.	_	
Inventor's signature:	Date:	
Residence: 122 Beckwith Street, Gaithers	burg, MD 20878 Citizenship:	<u>US</u>
Post Office Address: same as above		

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		Priority C	namicu
		Yes	No
(Country)	(Day/Month/Year Filed)		
nder 35 U.S.C.	§ 119(e) of any United States	provisional	
	nder 35 U.S.C. 18 Marci		nder 35 U.S.C. § 119(e) of any United States provisional 18 March 1999

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or under § 365(b) of any PCT international application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37 C.F.R. § 1.56 that became available between the filing date of the prior application and the national or PCT international filing date of this application.

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L. Klein (Reg. No. 41,119), Michele Wales (Reg. No. 43,975), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

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Full name of first joint inventor:	Steven M. Ruben		
Inventor's signature:		Date:	
Residence: 18528 Heritage Hills Drive,	Olney, MD 20832	Citizenship:	US
Post Office Address: same as above			
Full name of additional joint inventor:	Jian Ni		-
Inventor's signature:		Date:	
Residence: 5502 Manorfield Road, Rock	ville, MD 20853	Citizenship:	CN
Post Office Address: same as above		· · · · · · · · · · · · · · · · · · ·	
Full name of additional joint inventor:	Reinhard Ebner	,	
To the transfer of		Datas	,
Inventor's signature:	oithoroburg MD 20079	Date:	DE
Residence: 9906 Shelburne Terrace, #316, G Post Office Address: same as above	atthersburg, IVID 20076	Citizenship:	DE
	Coole A. Degen		
Full name of additional joint inventor:	Craig A. Rosen		
Inventor's signature:		Date:	
Residence: 22400 Rolling Hills Lane, La	ytonsville, MD 20882	Citizenship:	US
Post Office Address: same as above		······································	
Full name of additional joint inventor:	Yanggu Shi		
Inventor's signature:		Date:	
Residence: 437 West Side Drive, Apt. 102, C	Saithersburg, MD 20878	Citizenship:	CN
Post Office Address: same as above			

Full name of additional joint inventor:	Charles E. Birse		
Inventor's signature:		Date:	
Residence: 13822 Saddleview Drive, North	Potomac, MD 20878	_ Citizenship:	GB
Post Office Address: same as above			
•			

Full name of additional joint inventor:	Kimberly A. Floren	ce	
Investoria aigmatura.		Date:	
Inventor's signature: Residence: 12805 Atlantic Avenue, Rockvil	lle MD 20851	Citizenship:	US
Post Office Address: same as above			
Fost Office Address.			
Full name of additional joint inventor:	George Komatsoulis	5	
•			
Inventor's signature:		Date:	 .
Residence: 9518 Garwood Street, Silve	r Spring, MD 20901	_ Citizenship:	US
Post Office Address: same as above			
V II C 13141 - 111-1-4 inventors	David W. LaFleur		
Full name of additional joint inventor:	David W. Larieur		
Inventor's signature:		Date:	
Residence: 3142 Quesada Street, N.W., W	ashington, DC 20015	Citizenship:	US
Post Office Address: same as above	,	_ •	
Full name of additional joint inventor:	Paul A. Moore		
		7	
Inventor's signature:) AD 20074	Date:	T ITZ
Residence: 19005 Leatherbark Drive, G		Citizenship:	UK
Post Office Address: same as above	;		<u>-</u>
•			
Full name of additional joint inventor:	Henrik Olsen		
1 1			
Inventor's signature:		Date:	
Residence: 182 Kendrick Place, #24, G	aithersburg, MD 20878	_ Citizenship:	DK
Post Office Address: same as above			
· ·			
	D 177		
Full name of additional joint inventor:	Paul Young		
1/1/ 4		Date: 1/22	2/01
Inventor's signature: Pasidones: 122 Packwith Street Gaith	() Archurg MD 20878	Citizenship:	115
Residence: 122 Beckwith Street, Gaither Post Office Address: same as above	staudig, MID 20070	_ Chizenship.	
Post Office Address: same as above			

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			<u>Priority</u> Yes	/ Claimed No
(Number)	(Country)	(Day/Month/Year Filed)	
9		§ 119(e) of any United S	ates provisiona	ıl
plication(s) listed below. 60/125,055 (Application Serial No.)		h 1999	ates provisiona	ıl

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PCT/US00/06783	16 March 2000	Pending
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L. Klein (Reg. No. 41,119), Michele Wales (Reg. No. 43,975), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc. 9410 Key West Avenue, Rockville, Maryland, 20878.

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Inventor's signature:		Date:	
Residence: 18528 Heritage Hills Drive,	Olney, MD 20832	Citizenship:	US
Post Office Address: same as above			
Full name of additional joint inventor:	Jian Ni		
Inventor's signature:		Date:	
Residence: 5502 Manorfield Road, Rock	cville, MD 20853	Citizenship:	CN
Post Office Address: same as above		_	
Full name of additional joint inventor. Inventor's signature:	Reinhard Ebner	Date: 1/19/01	,
Residence: 9906 Shelburne Terrace, #316, (Gaithersburg, MD 20878	Citizenship:	DE
Post Office Address: same as above			
Full name of additional joint inventor:	Craig A. Rosen		
Inventor's signature:		Date:	
Residence: 22400 Rolling Hills Lane, L	aytonsville, MD 20882	Citizenship:	US
Post Office Address: same as above			
	-		
Full name of additional joint inventor:	Yanggu Shi		
Inventor's signature:		Date:	
Residence: 437 West Side Drive, Apt. 102,	Gaithersburg, MD 20878	Citizenship:	CN
Post Office Address: same as above			

Full name of additional joint inventor:	Charles E. Birse		
		D .	
Inventor's signature:	20070	Date:	CD.
Residence: 13822 Saddleview Drive, North	Potomac, MD 20878	_ Citizenship:	GB
Post Office Address: same as above			
	Windowsky A. Floren		
Full name of additional joint inventor:	Kimberly A. Floren	ce	
I		Date:	
Inventor's signature: Residence: 12805 Atlantic Avenue, Rockvill	le MD 20851	Citizenship:	US
Post Office Address: same as above	10, 1110 20031		
Post Office Address. Same as above			
Full name of additional joint inventor:	George Komatsoulis	3	
•			
Inventor's signature:		Date:	
Residence: 9518 Garwood Street, Silver	Spring, MD 20901	_ Citizenship:	<u>US</u>
Post Office Address: same as above	<u></u>		
			
Full name of additional joint inventor:	David W. LaFleur		
)		Deter	
Inventor's signature:	DC 20015	Date:	TIC
Residence: 3142 Quesada Street, N.W., W	ashington, DC 20015	_ Citizenship:	<u>US</u>
Post Office Address: same as above			
Full name of additional joint inventor:	Paul A. Moore		
Full hame of additional joint inventor.	1 aut A. Moore		
Inventor's signature:		Date:	
Residence: 19005 Leatherbark Drive, Ge	ermantown, MD 20874	Citizenship:	UK
Post Office Address: same as above		•	
Full name of additional joint inventor:	Henrik Olsen		·
Inventor's signature:		Date:	
Residence: 182 Kendrick Place, #24, G	aithersburg, MD 20878	_ Citizenship:	DK
Post Office Address: same as above			
			-
	D 137		
Full name of additional joint inventor:	Paul Young		
		Date:	
Inventor's signature:	archurg MD 20878	Citizenship:	US
Residence: 122 Beckwith Street, Gaithe	asourg, MID 20070	_ Chizenship.	
Post Office Address: same as above			

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Ruben, Ni, Ebner, Rosen, Shi, Birse, Florence, Komatsoulis, LaFleur, Moore, Olsen and Young hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

- (a) in and to the invention(s) known as 27 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 1/26/01, 1/23/01, 1/29/01, 1/26/01, 1/26/01, 1/26/01, 1/26/01, 1/26/01
 (also known as United States Application No. 09/661.453, filed September 13, 2000), in any and all applications thereon, in any and all Patent(s) therefor, and
- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the undersigned hereby grants the power to James H. Davis (Reg. No. 40,582), Kenley Hoover (Reg. No. 40,302), Michele Wales (Reg. No. 43,975), Jonathan Klein (Reg. No. 41,119), Joseph Kenny (Reg. No. 43,710), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHERE signature(s):	EOF, this Assignment is executed by the under	ersigned or	n the date(s) opposite their
Inventor's Signature:_		Date: _	1/26/01
	Steven M. Ruben		
Inventor's Signature:_		Date:	1/2/61
	Jian Ni		
Inventor's Signature:		Date:	
	Reinhard Ebner		,
Inventor's Signature:	lajlor	Date:	1/29/61
	graig A. Rosen		
Inventor's Signature:	mom ten	Date: _	1/26 100
Inventor's Signature:	Yanggu Shi	Date: _	1 26 M
	Charles E Birse		• •
Inventor's Signature:	Jell & Florence	Date: _	1/20/01
	Kimberly Florence		
Inventor's Signature:	George A. Kongrisanl	Date: _	1/26/01
	George Komatsoulis		·
Inventor's Signature:	- DAWLIM	Date: _	126 01
	David W. LaFleur		, ,
Inventor's Signature:	Pam A Moor	Date: _	1/26/01
	Paul A. Moore		
Inventor's Signature:	Henz Olan	Date: _	1/26/01
	Henrik Olsen	,	

Paul Young

Inventor's Signature:

ASSIGNMENT*

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Ruben, Ni, Ebner, Rosen, Shi, Birse, Florence, Komatsoulis, LaFleur, Moore, Olsen and Young hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

(a)	in and to the invention(s) known as 27 Human Secreted Proteins for which application(s) for patent in the
	United States of America has (have) been executed by the undersigned on

(also known as United States Application No. 09/661,453, filed September 13, 2000), in any and all applications thereon, in any and all Patent(s) therefor, and

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) In any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

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Each of the undersigned hereby grants the power to James H. Davis (Reg. No. 40,582), Kenley Hoover (Reg. No. 40,302), Michele Wales (Reg. No. 43,975), Jonathan Klein (Reg. No. 41,119), Joseph Kenny (Reg. No. 43,710), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature:		Date:	
	Steven M. Ruben		_
Inventor's Signature:		Date:	
	Jian Ni		_
Inventor's Signature:	J. Venes	Date: _//19/C+/	
	Reinhard Ebner		
Inventor's Signature:		Date:	
	Craig A. Rosen		_
Inventor's Signature:		Date:	
1	Yanggu Shi		
Inventor's Signature:		Date:	
	Charles E. Birse		_
Inventor's Signature:		Date:	
	Kimberly Florence		_
Inventor's Signature:		Date:	
	George Komatsoulis		
Inventor's Signature:		Date:	_
	David W. LaFleur	•	
Inventor's Signature:		Date:	_
	Paul A. Moore		
Inventor's Signature:		Date:	_
	Henrik Olsen		
Inventor's Signature:		Date:	_
	Paul Young	•	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, each of the undersigned, Ruben, Ni, Ebner, Rosen, Shi, Birse, Florence, Komatsoulis, LaFleur, Moore, Olsen and Young hereby sells, assigns, transfers, and sets over to Human Genome Sciences, Inc. ("Assignee") having a place of business at 9410 Key West Avenue, Rockville, MD 20850, its successors, assigns and legal representatives, his/her entire right, title and interest, including the right to sue and collect for all past, present and future damages, for the United States of America, including all its territories and possessions, and all other countries,

(a)	in and to the invention(s) known as 27 Human Secreted Proteins for which application(s) for patent in the United States of America has (have) been executed by the undersigned on
	01/22/01 (also known as United States Application No. 09/661.453, filed September 13, 2000), in any and all

applications thereon, in any and all Patent(s) therefor, and

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing (continuation, divisional) applications, reissues, extensions, renewals and reexaminations of the patent application or patent therefor listed above in part (a), to the full extent of the term or terms for which patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals, and examinations of such patent application, including, without limitation, patents, applications, utility models, inventor's certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

Each of the undersigned further agrees that said Assignee may apply for and receive patent(s) for said invention(s) in its own name; and agrees to execute all papers necessary in connection with said application(s) and any continuing application(s) (continuation, divisional, or continuation-in-part), substitutes, renewals, reissues, reexaminations, extensions, and all other patent applications on all such invention(s), including all rightful oaths, declarations, powers of attorney and other papers; and agrees to execute separate assignments in connection with such application(s) as the Assignee may deem necessary and expedient; and agrees to communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said invention(s) and the history thereof; and agrees to cooperate fully and completely with said Assignee, its successors, assigns, and representatives in securing, maintaining, and enforcing proper patent protection for said invention(s) and for vesting title to said invention(s) and all patent applications and all patents on said invention(s) in Assignee, its successors, assigns and representatives.

Each of the undersigned agrees to execute all papers necessary in connection with any interference that may be declared or litigation that may be instituted concerning the application(s) or patent(s) referred to above and to cooperate fully and completely with the Assignee, its successors, assigns, and representatives in obtaining evidence and going forward with such interference or litigation, including providing testimonial evidence.

Each of the undersigned hereby represents and warrants to Assignee, its successors, assigns and representatives that no assignment, grant, mortgage, license or other right or agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned and that full right to convey the same as expressed herein is possessed by the undersigned.

Each of the undersigned hereby grants the power to James H. Davis (Reg. No. 40,582), Kenley Hoover (Reg. No. 40,302), Michele Wales (Reg. No. 43,975), Jonathan Klein (Reg. No. 41,119), Joseph Kenny (Reg. No. 43,710), and Mark J. Hyman (Reg. No. 46,789) of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, MD, 20850 to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, this Assignment is executed by the undersigned on the date(s) opposite their signature(s):

Inventor's Signature:_		Date:
	Steven M. Ruben	
Inventor's Signature:		Date:
	Jian Ni	
Inventor's Signature:_		Date:
	Reinhard Ebner	
Inventor's Signature:	Craig A. Rosen	Date:
Inventor's Signature:	Yanggu Shi	Date:
Inventor's Signature:		Date:
in remot 5 orginators	Charles E. Birse	Date.
Inventor's Signature:		Date:
	Kimberly Florence	
Inventor's Signature:		Date:
	George Komatsoulis	
Inventor's Signature:	David W. LaFleur	Date:
Inventor's Signature.		
Inventor's Signature:	Paul A. Moore	Date:
Inventor's Signature:		Date:
· .	Henrik Olsen	
Inventor's Signature:	fal X	Date: 1/22/01
	/Paul/Young	/ /